

ABSTRACT of Disclosure

Protrusions called ridges are formed on the surface of a crystalline semiconductor film formed by a laser crystallization method or the like. A heat absorbing layer are formed below a semiconductor film. When the semiconductor film is crystallized by laser, a temperature difference is produced between a semiconductor film 1010 positioned above a heat absorbing layer 1011 and a semiconductor film 1013 of the other region to produce a difference in thermal expansion at the boundary of the outside end 1015 of the heat absorbing layer. This difference produces a strain to form a surface wave. The surface wave starting at the outer periphery of the heat absorbing layer is formed in the vicinity of the heat absorbing layer. When the semiconductor layer is solidified after it is melted, the protrusions of the surface wave remain as protrusions after the semiconductor film is solidified.